AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

1-145. (Cancelled)

146. (Currently Amended) An isolated mammalian~~adult~~ cell, wherein said cell endogenously expresses Hox11 (Hox11(+)) and lacks expression of CD45 (CD45(-)).

147. (Cancelled)

148. (Currently Amended) The cell of claim 146, wherein said cell expresses one or more cell markers selected from CD90, CD44, and CD29, but does not express CD34~~the group consisting of: retinoic acid receptor, estrogen receptor, EGF receptor, CD49b, VLA2, CD41, LFA-1, ITB2, CD29, NTC3 receptor, plasminogen receptor, transferrin receptor, TGF receptor, PDGF receptor, thyroid growth hormone receptor, and integrin beta 5~~.

149. (Previously Presented) The cell of claim 146, wherein said cell is obtained from peripheral blood or tissue of a mammal by a method comprising:

a) separating cells from said peripheral blood or tissue into a first cell population which predominantly expresses CD45 antigen on the surface of said cells and a second cell population which predominantly does not express CD45 antigen on the surface of said cells; and

b) selecting said second cell population and further separating Hox11(+) cells from said second cell population to obtain at least one Hox11(+), CD45(-) cell.

150. (Currently Amended) The cell of claim 149, wherein said at least one Hox11(+), CD45(-) cell expresses one of more cell surface markers selected from CD90, CD44, and CD29,

but does not express CD34~~the group consisting of: retinoic acid receptor, estrogen receptor, EGF receptor, CD49b, VLA2, CD41, LFA-1, ITB2, CD29, NTC3 receptor, plasminogen receptor, transferrin receptor, TGF receptor, PDGF receptor, thyroid growth hormone receptor, and integrin beta 5~~.

151. (Previously Presented) The cell of claim 146, wherein said cell is obtained from the spleen.

152-158. (Cancelled)

159. (Currently Amended) The cell of claim 151~~158~~, wherein said cell is a splenocyte.

160. (Previously Presented) The cell of claim 158, wherein said cell is obtained from bone marrow or peripheral blood.

161. (New) The cell of claim 146, wherein said cell can differentiate into two or more different cell types.

162. (New) The cell of claim 146, wherein said cell is a human cell.